

# MSK EMSY 6 Software

## The latest generation of machine operation



### Your benefits at a glance

- ✓ Easy operation of your packaging system
- ✓ Intuitive user interface with multi-touch technology
- ✓ Interface to common PLC controls
- ✓ Customer editor
- ✓ Individual upgrade options

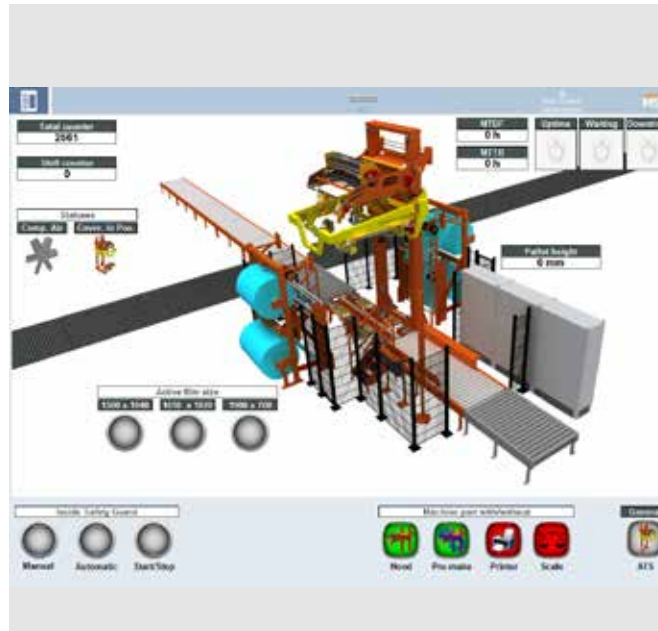
# MSK EMSY 6

## Visualization and control



### A picture is worth a thousand words

The automation of conveyor, palletizing, and packaging technology is becoming more and more demanding. In order to meet today's challenges, an operator must devote his full attention to the entire process. The new EMSY 6 software provides a quick, graphic overview and supports the setup of recipes or troubleshooting.



### MSK EMSY – developed for your MSK machine

EMSY stands for **E**lectronic **M**anagement **S**ystem and offers all the benefits of a modern SCADA system. The software is tailored precisely to MSK machines. A large and experienced team of engineers and developers guarantees its reliability. Ever since the first version 1.0 in 1996, today more than 80% of all MSK projects are delivered with MSK EMSY.



### Simple machine control

The clearly structured, intuitive user interface, easy to grasp status information, and user support for almost all functions of EMSY 6 allow for shorter training time for employees and simplified troubleshooting.

# MSK EMSY 6

## Functions



✓ = included    + = optional

in flyer page:

EMSY 6

### Hardware features

Standing desk version	6	✓
Support arm version	6	+
Touchscreen 15,6"	6	✓
Touchscreen 18,5"	6	+
Touchscreen 21,5"	6	+

### General operation / control

Status display and operation via buttons	7	✓
Graphic user guidance - Automatic and manual mode	7	✓
Graphic-supported parameter settings	7	✓
Parameter history	8	✓
Parameter database	8	+
Cycle editor for palletizers	8	+
Documentation package (machine manual and spare parts catalog)	9	+
Information tracking	9	✓
<ul style="list-style-type: none"> <li>■ Standard - up to 10 places; 1 data set</li> <li>■ Advanced - more than 10 places; multiple data sets</li> </ul>	9	+
Control MSK shuttle cars	9	+

# MSK EMSY 6

## Functions



✓ = included    + = optional

in flyer page:

EMSY 6

### Troubleshooting

Remote support

10

✓

Fault display with graphic-supported, systematic debugging and troubleshooting

10

✓

Fault messages with spare parts link

10

+

Fault messages with device-specific fault list

11

+

Sequence control analysis

11

+

PLC monitoring inputs / outputs

11

+

PLC monitoring addresses

12

+

Messenger

12

+

### Maintenance / Service

Maintenance management

12

✓

### Connections

Connection to peripheral devices (bar code scanner, labeler, etc.)

13

+

Connection to customer system (ERP, MES, SCADA, etc.)

13

+

External display

13

+

### Statistics

Statistics package (time statistics, production statistics standard, fault statistics, maintenance statistics)

14

+

Production statistics advanced

14

+

Consumption statistics for film, energy, gas, and air

15

+

# MSK EMSY 6

## Functions



✓ = included    + = optional

in flyer page:

EMSY 6

### Quality management

Photo documentation

16

+

### Customization

Customer editor

16

✓

Customized logistics systems

17

+

### Safety

Automatic backups on customer server

18

+

Backup on USB stick

18

+

Password-protected login

18

✓

RFID user identification

18

+

### Other EMSY products

MSK EMSY smart

19

+

MSK EMSY move

20

+

MSK EMSY analytics (for the glass industry)

21

+

# MSK EMSY 6

## Hardware features



### Standing desk version

The hardware of MSK EMSY 6 offers a modern design for industrial applications. The standing desk version contains all EMSY components in a compact console with multi-touch screen. The standing desk version provides an optimum view into the machine during operation.



### Multi-touch screen technology

The ability to switch between pages and views with a “swipe” movement, as well as the zoom and detail function make operation intuitive and convenient.

**Standard:** with 15.6” screen

**Optional:** with 18.5” or 21.5” screen



### Support-arm version

The touch panel is attached to a support arm at a comfortable operator height, making it easier to clean the floor. It can be rotated by up to 90° and thus adapts to the respective situation.

# MSK EMSY 6

## General operation/control



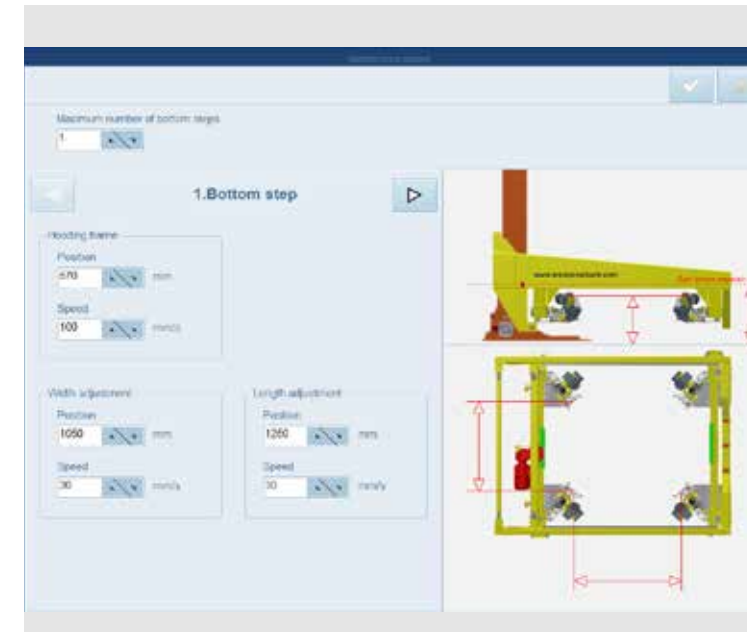
### Status display and operation via buttons

The clearly structured menu navigation and the intuitive user interface with buttons makes it very easy to find functions. Important status information can be viewed at a glance.



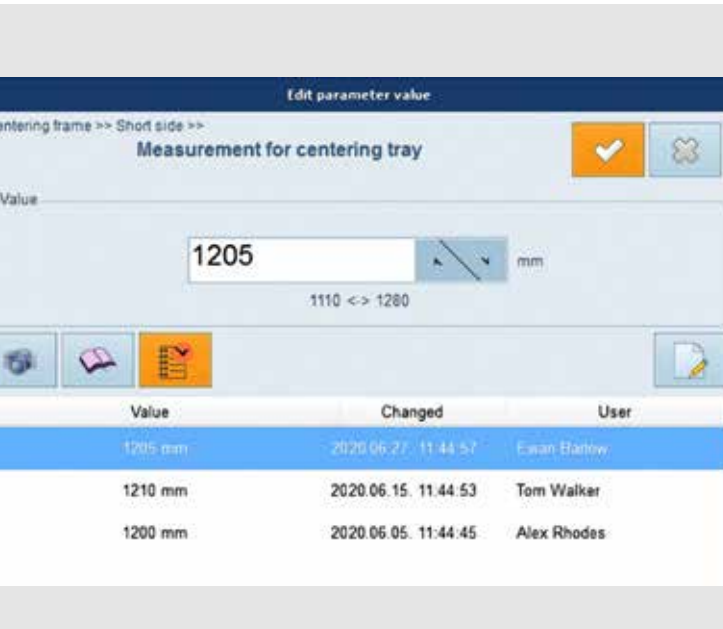
### Graphical user guidance - Automatic and manual mode

The easy-to-understand 3D animations simplify the operation of the machine in automatic and manual mode. Machine functions can be viewed in advance in simulation mode, giving the operator confidence.



### Graphical-supported parameter setting

The new MSK EMSY 6 software enables even simpler graphics-supported parameter setting. This reduces job-change times as well as training and familiarization times.



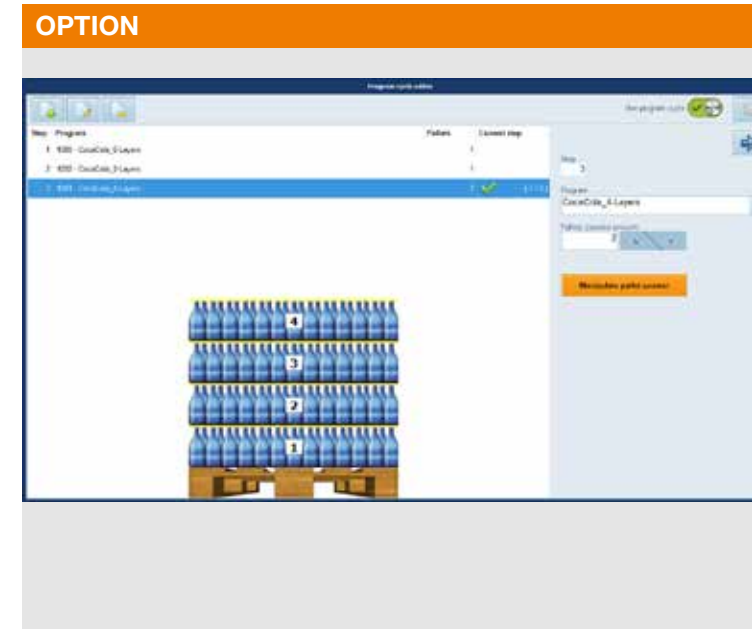
### Parameter history

By providing a parameter archive, MSK EMSY 6 supports the fine-tuning of a system in the course of the production process. All settings are archived with a change history and filter function. Previous parameter settings can be reactivated if necessary.



### Parameter database

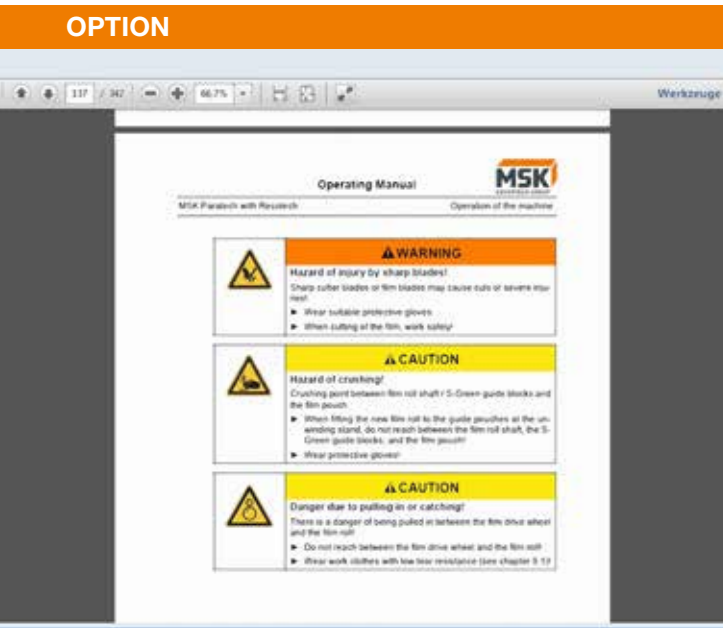
The software provides automation for parameter-controlled machine settings. All parameters that are important for production are managed either on a product or batch basis. This saves time when changing jobs and retrofitting. Once parameters have been entered, they can automatically be used for other programs.



### Cycle editor for palletizers

The cycle editor makes it possible to implement different palletizing specifications in predefined sequences. For example, the packing height of the pallets can be adapted to the requirements of the warehouse structure.

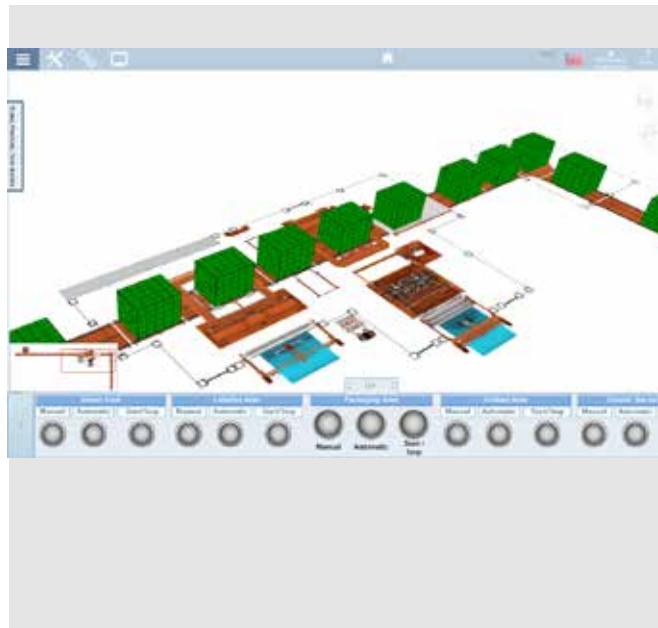




### Documentation package

The machine manual and the spare parts catalog Mechanical and Electrical can be conveniently viewed via MSK EMSY.

**Note:** With optional function “Fault messages with spare parts link” (p. 10), these are also linked to fault displays.

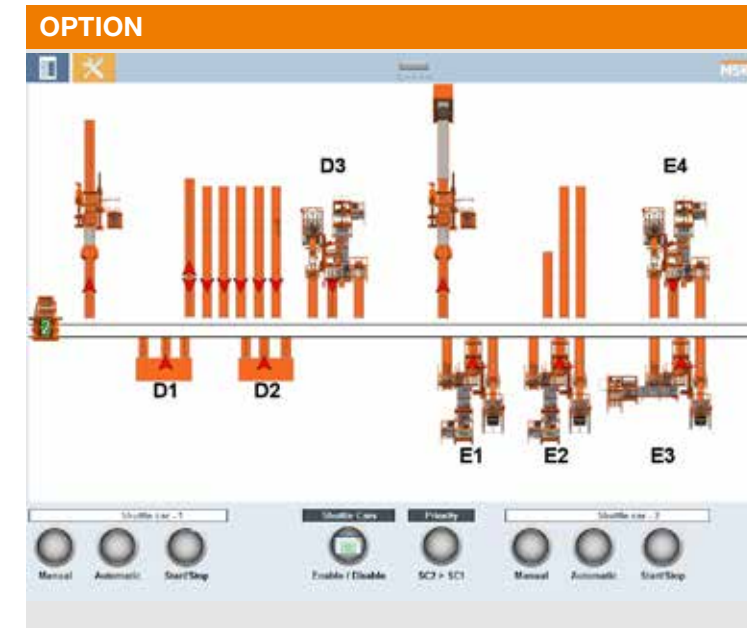


### Information tracking

Pallet / product data can be tracked in real time by graphically displaying the most important information (e.g. weight, size, bar code, pallet type)

**Standard:** For up to 10 places; carrying 1 data set (e.g. pallet type, height)

**Advanced:** For more than 10 places; customer-side system connection possible; carrying several data sets



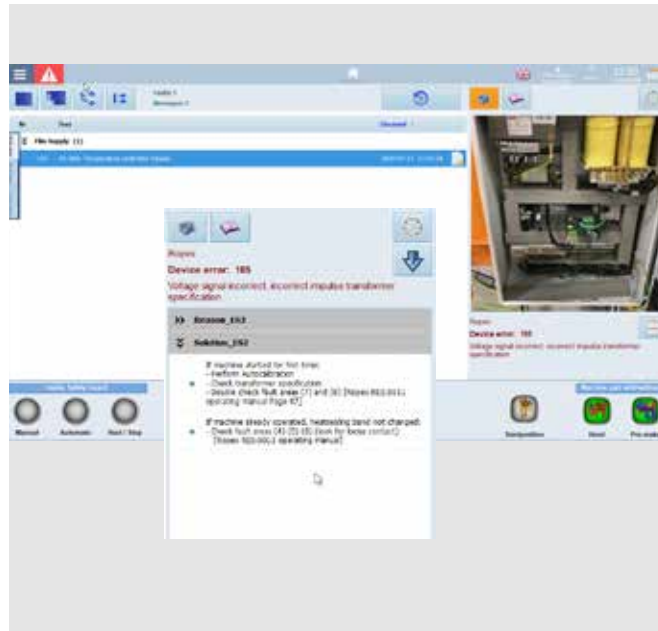
### Control of shuttle cars

The MSK EMSY software uses this function to control shuttle cars. The route is displayed graphically with all docking stations. The customer can define and change stations and travel orders as well as priority specifications for the shuttle cars very easily and with graphic support and without PLC knowledge.



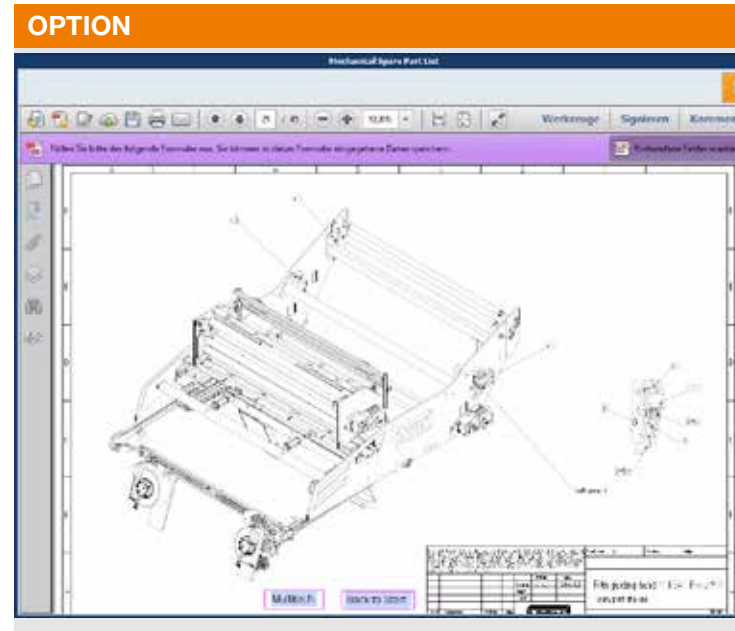
## Remote support

In the event of a malfunction or standstill, MSK specialists are available around the clock for rapid assistance in order to communicate directly with the PLC or the EMSY software of your MSK system.



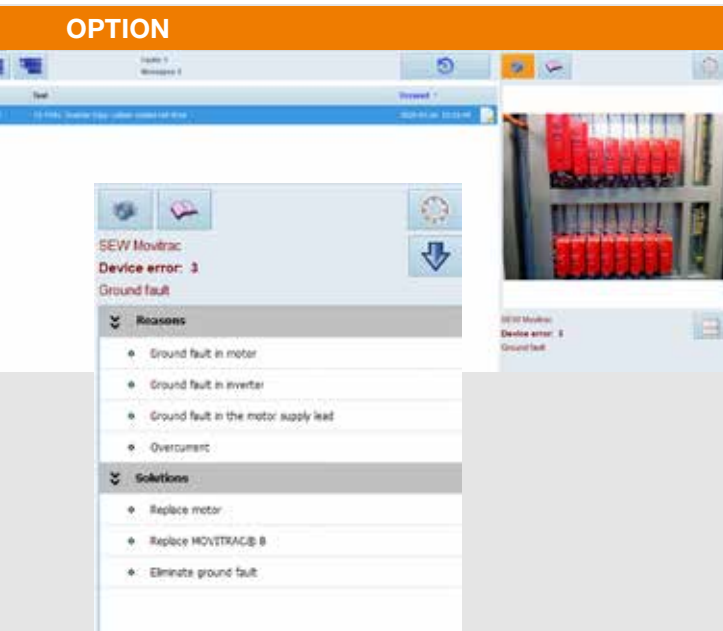
## Simplified troubleshooting

With MSK EMSY 6 troubleshooting becomes even easier for the operator. In addition to the fault message, the system simultaneously displays possible causes and solutions for rapid troubleshooting.



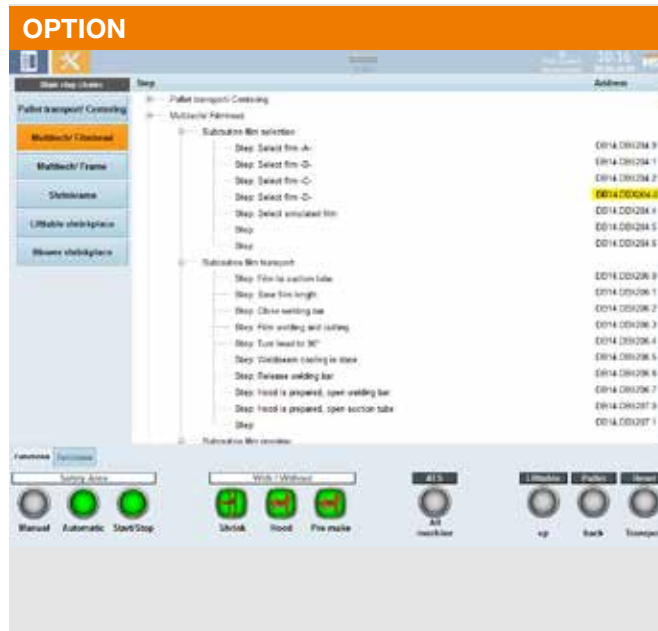
## Fault messages with spare parts link

For quick troubleshooting, this EMSY function provides a link to the corresponding spare parts catalog, electrical schematic, and machine manual for each fault message.



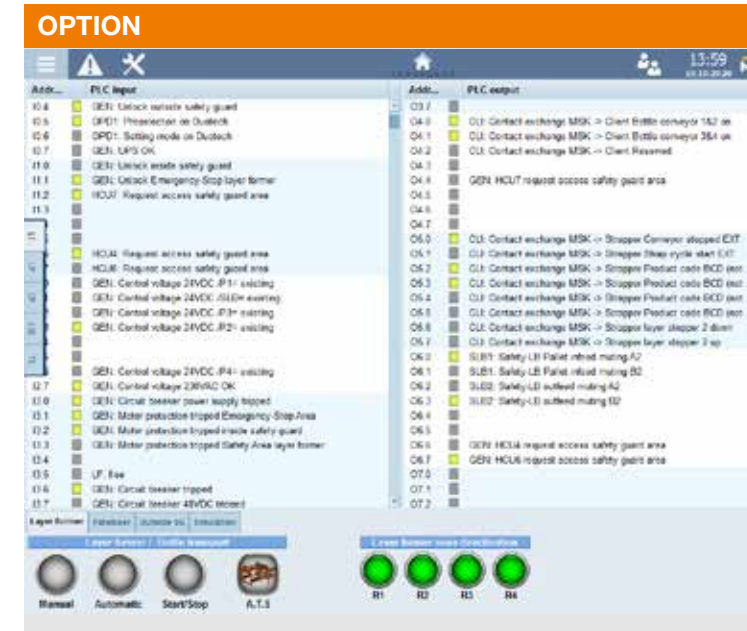
## Fault messages with device-specific fault list

For fast troubleshooting, this EMSY function provides a device-specific fault list for each fault message, directly visible in EMSY.



## Sequence control analysis

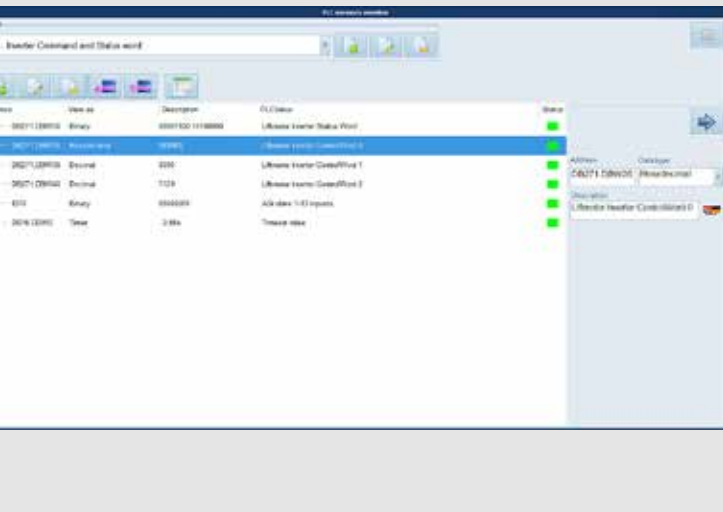
The sequence analysis supports troubleshooting by showing in which individual step of the control the machine is located at the moment.



## PLC monitoring inputs / outputs

For monitoring the individual PLC inputs and outputs and for simplified troubleshooting, this option provides a convenient graphical overview of the system signals on the EMSY screen, which can otherwise only be viewed in the programming unit.

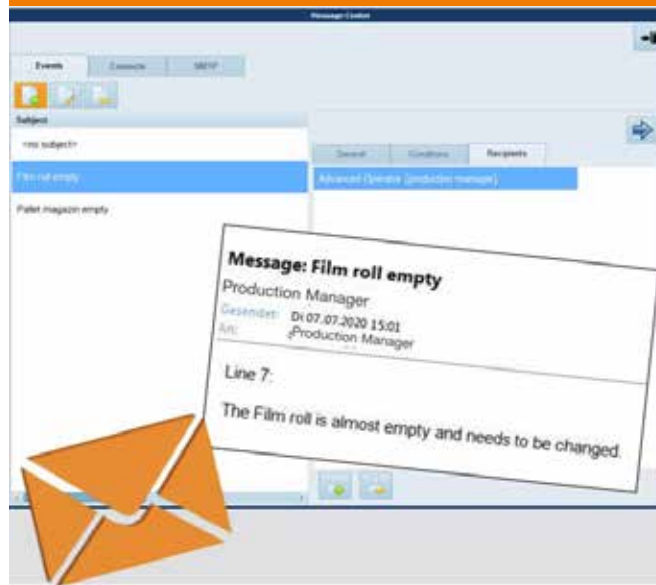
### OPTION



### Monitoring PLC addresses

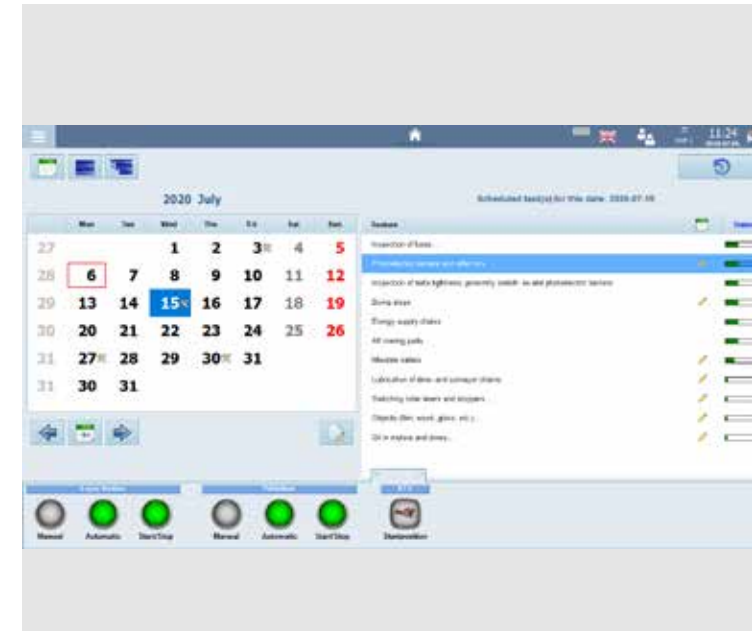
In order to be able to evaluate internal machine signals in the event of fault diagnosis, this option offers convenient status monitoring of the PLC addresses on the EMSY screen. Address tables can be saved individually.

### OPTION



### Messenger

The Messenger automatically sends fault messages, status and maintenance indications via SMS or email to a customer-specified mobile phone or email address. In this way the operator, whether he is a forklift driver or a production employee, is informed about his MSK system upon request.



### Maintenance management

All maintenance intervals are displayed in advance in a calendar overview. Maintenance work can therefore be better planned and coordinated. Maintenance dates can be adapted to individual production planning by the customer, using the calendar view.

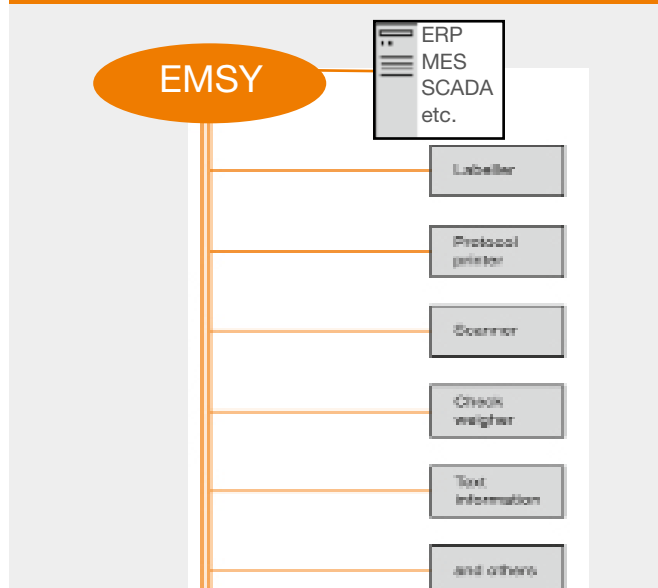
## OPTION



### Connection of peripheral devices

MSK EMSY 6 enables communication with peripheral devices such as bar code scanners, labelers, scales, etc. The software can collect, process, and forward information.

## OPTION



### Connection to customer system

Data from the MSK system or from connected peripheral devices is transferred to the customer's system (e.g. ERP, MES, SCADA, etc.) based on a SOAP or HTTP REST protocol.

**Advanced:** Conversely, MSK EMSY can also forward information from the customer's system to peripheral devices. For this purpose, MSK offers individual solutions depending on requirements.

## OPTION



### External display

If the production processes require it, important information and messages relating to the MSK system are shown on an external display or TV screen. In this way the operator stays informed without being directly at the machine.

**Optional:** 42", 50", or 65" TV screen

## OPTION



### Statistics package:

#### Fault/maintenance/production / time statistics

EMSY 6 provides statistics on faults, maintenance, and production as well as time statistics on run times, waiting times, and downtimes and displays these graphically. They can be exported to standard programs.

### Optional: Production statistics advanced

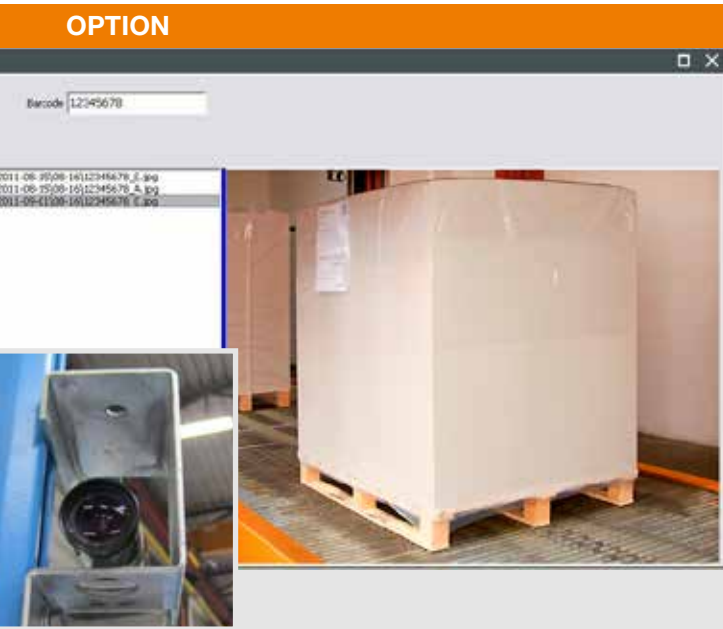
It is possible to further group different pallet types or to evaluate several production lines separately for statistical analysis as well as advanced search and filter options for product and packaging data.

## OPTION

### Consumption statistics for film, electricity, gas, air

The EMSY software provides graphical statistics on the consumption of film, energy, gas, and compressed air per pallet. It is also possible to generate analyses per shift, week, month etc.

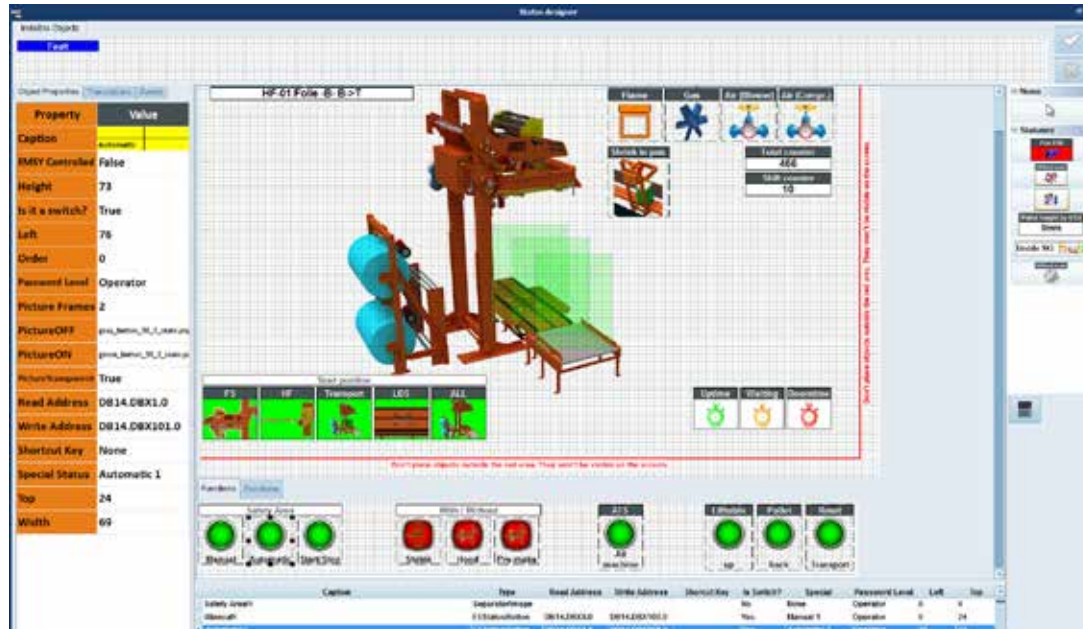




### Photo documentation

This EMSY function enables automated photo documentation before / after the packaging process. The photos are numbered and stored with a bar code if there is a bar code scanner. The maximum capacity is 80 pallets per hour.

Photo documentation is available with two or four cameras.



### Customer editor

The customer editor allows the customer to add or change functions in the EMSY software without the need to know programming languages or buy an additional software (license).



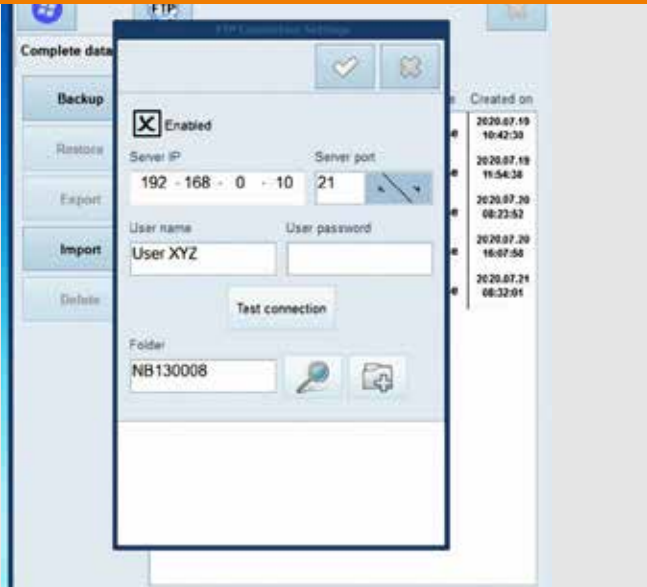
## OPTION



### Automation of the complete pallet logistics

In order to automate the entire material flow and pallet handling from incoming goods to truck loading or to the finished goods warehouse, MSK creates customized and fully automatic complete systems with pallet conveyor technology, palletizing systems and packaging lines – controlled by MSK EMSY.

### OPTION



### High data security through automatic backups

The automatic backup option ensures especially high data security. The machine data is backed up on a customer's FTP remote server and can be played back to the machine operating terminal if needed.

### Optional: Backup USB stick

The machine data can also be stored on a 16 GB USB stick.

### OPTION



### Safe RFID user identification

Authorized login to the EMSY terminal is carried out by secure and personalized RFID identification.

**Standard:** MSK EMSY 6 offers a secure system through password-protected login.

# MSK EMSY 6

## Other EMSY products



### OPTION



### MSK EMSY smart

New

The user-friendly app for your smartphone or tablet provides a status of the wrapped pallets or products in real time, quickly and anywhere, without having to be on site at the MSK system.

# MSK EMSY 6

## Other EMSY products

### OPTION



### MSK EMSY move

By using a modern industrial tablet, **MSK EMSY move** offers mobility and security in the operation of a system's extensions. This software is a convenient solution, especially for long conveyor lines and palletizing or packaging systems with several modules or for the fine adjustment of drives in the field.

### OPTION

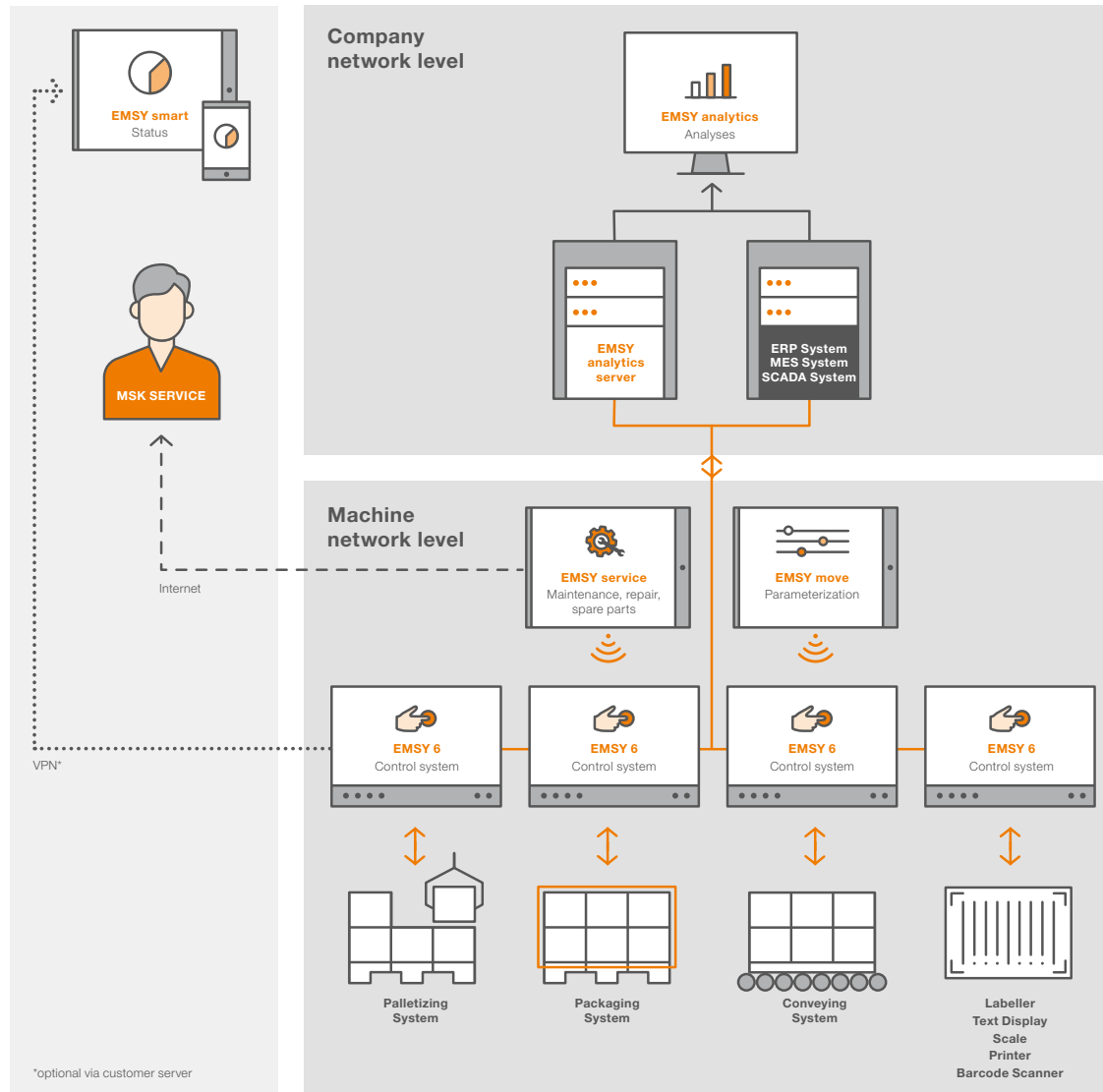


### MSK EMSY analytics - Transparency for the glass industry

The new software MSK EMSY analytics networks the data of all EMSY-controlled machines at the Cold End in the sense of Industry 4.0. The web-based application is used for comprehensive analysis of the entire Cold End. The customizable dashboard enables the display of the individually preferred status information depending on system or component in real time and at a glance. Health & Condition monitoring, energy consumption, and performance data of individual components are displayed graphically. The resulting recommendations for action serve to increase the short and long-term efficiency of the Cold End.

## Outside Company

## Inside Company



Information from all kinds of peripheral devices is managed by the software and can be forwarded to your system (MES, ERP, SCADA, etc.).

The software can be networked with other products of the MSK EMSY family, allowing comprehensive plant analysis and mobile status monitoring. Service and maintenance work are facilitated by a digital MSK service Pad.

Customize your machine control optimally with the MSK EMSY 6 software to your individual requirements. We will be happy to advise you.